

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/617,952	07/10/2003	Paul Mark Haines	10011994-2	4485	
7590 04/19/2005			EXAMINER		
HEWLETT-PACKARD COMPANY			NGUYEN, L	NGUYEN, LAMSON D	
Intellectual Property Administration					
P. O. Box 272400			ART UNIT	PAPER NUMBER	
Fort Collins, CO 80527-2400			2861		
		DATE MAILED: 04/10/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summany	10/617,952	HAINES ET AL.				
Office Action Summary	Examiner	Art Unit				
	Lamson D. Nguyen	2861				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on restriction election dated 12/22/04.						
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>See Continuation Sheet</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1,3,5-7,15,16,20,22-27,29-32,40,41 a</u>	<u>nd 45-48</u> is/are rejected.					
7) Claim(s) <u>9,11-13,18,19,34-38,43 and 44</u> is/are						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	. 🗖	Patent Application (PTO-152)				
Paper No(s)/Mail Date 02/14/05 and 05/17.  U.S. Patent and Trademark Office	6)					
	ction Summary P	art of Paper No./Mail Date 20050417				

Continuation of Disposition of Claims: Claims pending in the application are 1,3,5-7,9,11-13,15,16,18-20,22-27,29-32,34,36-38,40,41 and 43-48.

#### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election without traverse of species 5 in the reply filed on 12/22/04 is acknowledged.

## Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3, 5-7, 15, 16, 20, 22-27, 29-31, 40-41, and 45-48 are rejected under 35 U.S.C. 102(a) as being anticipated by Steven et al. (6,588,891).

# Steven et al teach an inkjet filter comprising:

#### Claims 1, 25, 45:

a filter material configured to attach to a pen, wherein a flow of ink through the
filter material is substantially multidirectional (figure 2 teaches filter with two
slanted filter mesh sheets meet at the tip, and wherein the flow of ink entering
the filter and leaving the filter mesh in different directions through the two
mesh sheets)

#### Claims 3, 27:

 the filter material comprises pores having a dimension less than a dimension of a smallest ink flow passage in the pen (figure 2 teaches filter meshes 13, Art Unit: 2861

thus inherently having pores or openings that are small enough to prevent particles in the inflow to go through)

# Claims 5, 22, 29:

 The filter comprises a chamber at least partially bounded by the filter material (figure 2 teaches filter chamber bounded by the two filter meshes 13)

# Claims 6, 23, 30, 48:

the flow of direction of ink into the chamber is different than a flow direction
 from the chamber (figure 2 teaches ink direction coming through the chamber
 is different from the direction the ink flow leaving the filter meshes)

# Claims 7, 31, 47:

the filter material comprises more than half a surface area of the chamber
 (figure 2 teaches filter meshes 13)

# Claims 15, 40:

the filter has a rectangular cross section (figure 2)

## Claims 16, 41:

 the filter comprises a bag (figure 2 teaches two filter meshes 13 enclose to create a bag) a filter comprising a filter material configured to attach to a pen, wherein an
effective filtration surface area of the filter is substantially greater than any
projection surface area of the filter (figure 2 teaches an effective filtration area
which is the whole filtration area being larger than either area defined by each
filter mesh 13)

Claim 24:

an ink filter material configured to attach to a pen, and a chamber at least
partially bounded by the filter material, wherein a flow direction of ink into the
chamber is substantially different than a flow direction of ink from the
chamber, wherein the filter material comprises more than half of a surface
area of the chamber(figure 2 teaches ink filter; figure 2 teaches ink direction
coming through the chamber is different from the direction the ink flow leaving
the filter meshes 13)

Claim Rejections - 35 USC § 103

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steven in view of Otis, Jr. et al. (6,572,214).

Steven teaches all claimed features of the invention except:

Art Unit: 2861

# • a pressure regulator

It is well-known in the art of inkjet printers to utilize a pressure regulator (figure 3, regulator 30)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Steven to incorporate the teaching of a voltage regulator taught by Otis for the purpose of regulating ink pressure.

# Allowable Subject Matter

Claims 9, 11, 13, 18, 19, 34, 36, 37, 38, 43, and 44 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamson D. Nguyen whose telephone number is 571-272-2259. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Talbott can be reached on 571-272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/617,952

Art Unit: 2861

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

\*\*\*

PRIMARY EXAMINER

Page 6